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Editorial

Although the intracellular role of ATP as an energy source was well established soon after its discovery, the role of ATP as an extracellular signalling molecule was slow to be accepted. There were early descriptions of the extracellular actions of ATP on the heart and blood vessels [1] and the nervous system [2]. Release of ATP from sensory nerve collaterals during antidromic stimulation was demonstrated [3] and in 1970, ATP was proposed as a neurotransmitter in non-adrenergic, non-cholinergic autonomic nerves and the term 'purinergic' established [4]. However, it was not generally accepted until both ionotropic and metabotropic receptors for ATP were cloned and characterised in the early to mid 1990s (see [5]). There followed a rapid explosion of interest in purinergic signalling in a wide range of biological systems, including nervous, cardiovascular, respiratory, immune, urinogenital, musculo-skeletal and gastrointestinal systems and the special senses (see [6]) and studies of changes in expression of receptors during development, ageing and disease (see [7]). There is strong recent emphasis on the therapeutic potential of purinergic agents (see [8]). My international colleagues and I, together with Springer, feel that it is timely to launch a journal devoted to purinergic signalling to bring together the diverse molecular, physiological, biochemical, pharmacological and clinical studies of different systems and to encourage bridges to be built between basic science, clinical medicine and industrial development.

The new journal was announced at the Purines 2004 Meeting in Chapel Hill and we are most grateful to Ken Harden and his organising team to allow us to approach the many outstanding participants that were invited to speak at the Meeting, to contribute papers in the inaugural issues.

Geoffrey Burnstock
Editor-in-Chief

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